# Montana Department of Transportation Research Program June 2000

# EXPERIMENTAL PROJECT PROPOSAL FOR THE EVALUATION OF A THIN-COMPOSITE WHITETOPPING (Workplan)

**Location:** Kalispell, Montana. Idaho Street East (NINHS P1)

approximate reference point (RP) 120.97 at 1<sup>st</sup> Ave and extends easterly 0.8 kilometers to RP121.47 at 8<sup>th</sup> Ave.

Length: 0.8 km (0.48 mile), Flathead County.

**Project Number:** STPP 1-2(93)121

**Type of Project:** 130 mm Thin Composite Whitetopping

**Principal Investigator:** Construction: Dale Hancock, Engineering Project Manager

Construction Report/1461's, Annual Evaluations and Final

Reports: Research Program, Craig Abernathy

## **Objective**

This project was nominated to perform preventative maintenance of the existing pavement. The extent of the project is mill the existing plant mix and replace it with thin whitetopping (PCCP) to extend the project's service life.

#### **Experimental Design**

Mill off approximately 130 mm and replace with 130 mm of fiber-reinforced PCCP (see attached typical). Joint spacing will be approximately 1.82-1.92 meters with depth at 25mm..

### **Estimated Cost**

Construction plus CE: \$600,274.00

### **Evaluation Procedures**

Visual inspection of whitetopping will include full crack-mapping of entire project which could include abrasion, spalling, faulted transverse cracking, shoulder joint separation, unbonded panels and lane/outer shoulder displacement. The evaluation will also include comparing this project with the recently completed Grade S (West Idaho St.-Kalispell, SFCN 1-2(94)120) project adjacent to the East Idaho site. This evaluation will involve rutting measurements and crack inventory. IRI data will also be included. The Grade S data will be collected at each full intersection (6) and then every .25 km thereafter until end of project. There will be an attempt to track all maintenance costs on both projects during the evaluation period. Traffic data and ESAL's are identical for both projects. Corings will be performed on suspected failure areas.

#### **Evaluation Schedule**

Research staff will monitor performance for a period of five years annually, with every other year up to twelve years. This is in accordance with the Department's "Experimental Project Procedures". Annual Reports (FHWA 1461) are required as well as a Final Project Report (responsibility of Research).

2000: Construction To be completed by mid September. Construction

will be monitored and report to be generated by

Research.

2001-2005: Annual Evaluation 1461 and annual reports

2007-2011: Biennial Evaluation 1461 annual and final reports